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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,524	02/19/2002	Hiroaki Ito	P67646US0	1675

136 7590 03/31/2004

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WASHINGTON, DC 20004

EXAMINER
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BOCHNA, DAVID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/076,524	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> David E. Bochna	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-7,9,10 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7,9-10,13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Applicant's arguments with respect to claims 2-7, 9-10, 13-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-7, 9-10, 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kertesz.

In regard to claims 2, 9-10, and 13-16 Kertesz discloses a tank joint part 3 welded to a resinous outer surface 6 of a fuel tank for joining another device 2 thereto wherein the tank joint part 3 is composed of PBT, PBN, POM, PPS, aliphatic polyketone, PVDF and PE and where the outer surface of the tank 6 is made from HDPE. However, Kertesz does not specifically disclose the bonding strength or the difference in volume swelling between materials of the tank joint part and the outer surface of the tank is 10% or less when they swell with fuel, as measured under the specific conditions recited in claims 2, 9 and 10.

However, the Applicants' specification discloses that the fuel tank of the present invention has an outer layer made of HDPE and that the tank joint part is preferably made out of

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PPS, POM, PA or EVOH, and that the combination of these two materials will have a bonding strength of 2 MPa and that the fuel permeability of these two materials will not allow the tank joint or fuel tank to swell more than 10% when exposed to fuel under the specific conditions recited in claims 2, 9 and 10.

Therefore, the connection of the tank joint part 3 and the fuel tank 6 a of Kertesz would have a similar bonding strength and would not swell more than 10% under the specific conditions recited by the Applicant because both the Applicant and Kertesz are disclosing that their tank joints are made from the same materials, and because they are both made from the same materials they would inherently act the same under the same claimed specific conditions.

In regard to claim 3, the main 2 and joining members 3 form a unitary product of injection molding. Kertesz does not disclose that the main and joining members are made out of two different colors. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to change the color of one of the members because a color change is seen as an ornamental and a change in ornamental design having no mechanical function is an aesthetic design consideration within the skill of the art. In re Seid, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

In regard to claim 4, the main 2 and joining members 3 are complementarily engaged with each other in cross section (see fig. 1).

In regard to claim 5, the joining member 3 is of the multilayer structure comprising at least two joining submembers 14, 3 (see fig. 6) lying between the tank 6 and the main member 2.

In regard to claim 6, the main member 2 and the joining submembers 3 form a unitary product of injection molding.

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In regard to claim 7, the main member 2 and the joining submembers 3 are complementarily engaged with each other in cross section (see fig. 1).

In regard to claims 9 and 10, the material of the tank joint part 6 and the joining submembers 2, 3 has a fuel permeability of 2.5 mgmm/cm<sup>2</sup>/day or less as measured under specific conditions (tank 6 is made from HDPE and fuel members 2, 3 are made from PPS or other same materials disclosed by applicant).

In regard to claim 17, the tank joint part is a fuel filler valve.

In regard to claim 18, the tank joint part 2 is a pipe for connecting a hose 4 to the tank.

In regard to claim 19, the tank 6 is a single-layered resinous tank.

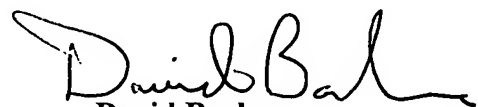
In regard to claim 20, the tank 6 is an automobile fuel tank.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



**David Bochna**  
**Primary Examiner**  
**Art Unit 3679**  
**March 23, 2004**